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Joachim Koerner

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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/777,257  
Filing Date: February 12, 2004  
Appellant(s): KOERNER ET AL.

**MAILED  
OCT 03 2007  
GROUP 3700**

\_\_\_\_\_  
David G. Boutell  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed on June 15<sup>th</sup>, 2007 appealing from the Office action mailed November 30<sup>th</sup>, 2005.

**(1) *Real Party in Interest***

A statement identifying the real part interest is contained in the brief.

**(2) *Related Appeals and Interferences***

The brief contains a statement identifying that there are no other Appeals or Interferences known at this time which will directly affect or be directly affected by or have a bearing on Board's decision in the pending appeal.

**(3) *Status of claims***

The statement of the status of claims contained in the brief is correct.

**(4) *Status of Amendments***

No amendment after final has been filed.

**(5) *Summary of Claimed subject matter***

The summary of claimed subject matter contained in the brief is correct.

**(6) *Grounds of rejection to be reviewed on appeal***

The ground of rejection set forth in the appeal brief is correct.

**(7) *Claims Appendix***

The appealed claims in the appendix of the brief are correct.

**(8) *Evidence relied upon***

6,196,219 Hess et al. 06-2001

**(9) *Grounds of rejection***

The following ground(s) of rejection are applicable the appealed claims:

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Claims 10, 12, 14 and 15 as failing to comply with the written description requirement under 5 U.S.C. § 112, first paragraph and claims 10-19 rejected under 35 U.S.C. § 102 (b) as being anticipated by US Patent 6,196,219 to Hess et al.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims **10, 12, 14 and 15** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims contain subject matter (**“pausing for a pre-determined time separation period”, “activating the time delay unit for a pre-determined time separation”, “deactivating the vibration unit and initiating a time delay”, and “activating the vibrating unit over a drying time period”**) which was not described in the specification.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim **10** is rejected under 35 U.S.C. 102(b) as being anticipated by Hess et al. (US 6,196,219). **Referring to claim 10**, Hess discloses a liquid droplet spray device for an inhaler

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suitable for respiratory therapies that comprises a micro-dosing device **5** having a dosing chamber **9** for the at least partial reception of a liquid quantity and with which is associated at least one discharge opening **14**, a vibrating unit **10** in operative connection with at least one boundary surface of the dosing chamber in order to vibrate the same for a discharge process, a delivery function unit, connected to the vibrating unit, for activating the latter during a delivery time period, and drying function unit, the method comprising the steps of activating the vibrating unit during a delivery time period; pausing for a pre-determined time separation period **(Inherently there is a pause between the inhalation period and the drying period)**; and activating the drying function unit to remove liquid residues from the dosing chamber **(see figures 2 through 5)**.

**Referring to claim 11**, Hess discloses a method step wherein the delivery function unit and the drying function unit are parts of a common electronic control unit **(see column 7 lines 25-35)**.

**Referring to claim 12**, Hess discloses a micro-dosing device **5** having a dosing chamber **9** for the at least partial reception of a liquid quantity and with which is associated at least one discharge opening **14**, a vibrating unit **10** in operative connection with at least one boundary surface of the dosing chamber in order to vibrate the same for a discharge process, a delivery function unit, connected to the vibrating unit, for activating the latter during a delivery time period, and a drying function unit for removing liquid residues from the dosing chamber, configures for activation in time-separated manner with respect to the delivery function unit **(Inherently there is a pause between the inhalation period and the drying period)**, wherein the delivery function unit and drying device are parts of a common electrical control device

provided with a time function element for coordinating the time-separated activating processes of the delivery function unit and the drying function unit, the method comprising the steps of activating the delivery function unit to dispense a medium; activating the time delay unit for a pre-determined time separation (**Inherently there is a pause between the inhalation period and the drying period**); and activating the drying function unit for a drying process.

**Referring to claim 13**, Hess discloses a method step wherein the drying function unit is connected to the vibrating unit and further comprising the step of activating the vibrating unit for the drying process (see **figure 5 and column 7 lines 1 through 45**).

**Referring to claim 14**, Hess discloses a method that comprises the steps of activating the vibrating unit for a delivery time period for the discharge of the liquid quantity, deactivating the vibrating unit and initiating a time delay (**Inherently there is a pause between the inhalation period and the drying period**), and initiating a drying process to remove liquid residues remaining in the dosing chamber (see **figure 5 and column 7 lines 1 through 45**).

**Referring to claim 15**, Hess discloses a method wherein the drying process further comprises activating the vibrating unit over a drying time period (see **figure 5 and column 7 lines 1 through 45**).

**Referring to claim 16**, Hess discloses a method step wherein the drying process further comprises the step of activating a heating device affecting the dosing chamber (see **column 7 lines 1-45**).

**Referring to claim 17**, Hess discloses a method step wherein the drying process further comprises the step of activating a delivery device for pumping out the liquid residues (see **column 7 lines 1-45**).

**Referring to claim 18**, Hess discloses a method step wherein the drying process further comprises the step of activating a heating device affecting the dosing chamber (**see column 7 lines 1-45**).

**Referring to claim 19**, Hess discloses a method step wherein the drying process comprises the step of activating a delivery device for pumping out the liquid residues (**see column 7 lines 1-45**).


**(10) Response to Arguments**

The appellant first argues that the subject matter “paused for a pre-determined time separation period” is found in several locations particularly paragraph [0005] lines 1-5, lines 12-13; paragraph [0008]. As stated in the brief paragraph [0005] lines 1-5 states “This problem is solved in that additionally a drying function unit is provided, which is activatable in time separated manner from the delivery function in order to free the dosing chamber from liquid residues.” The examiner would like to point out that the appellant’s specification does not mention “pause” and “pre-determined”. The term “paused for a pre-determined time separation period” as stated in the claims implies that a control unit on the device sets a time frame in which there is a pause in the operation for a pre-determined time where as the term “time separated manner” as stated in the specification implies that there is no set time frame by the control unit and the time separation period can vary from one delivery time period to the next meaning the time separation period could be 1 second for the first delivery time period and 60 second for the second delivery time period. Therefore, the appellant specification does not state the subject matter “paused for a pre-determined time separation period”.



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The appellant also argues that the Hess reference does not teach pausing for pre-determined time separation period; and activating the drying function the drying function unit to remove liquid residues from the dosing chamber. The examiner disagrees. Column 7 lines 15-25 of the Hess reference states that "the heating may contribute at the end of the atomization cycle to evaporate any minute amount of liquid left in space 9". The term "at the end of the atomization cycle" implies that there is a pause for a pre-determined time separation period and the flexible heating element (**flexible heating element defining the drying unit**) heating the surface to evaporate any liquid left in the space at the end of the atomization cycle implies that the drying unit being the heating element (**see column 6 lines 62-67 and column 7 lines 1-25**) is activated after the end of the atomization cycle. That short time frame between the end of the atomization cycle and the activation of the heating element is defined as the pausing for pre-determined time separation period.

Respectfully submitted,

Nihir Patel   
September 28<sup>th</sup>, 2007

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